FOREST SITE PREPARATION

(Acres)
Code 490

Natural Resources Conservation Service
Conservation Practice Standard

I. Definition

Treating areas to improve site conditions for establishing a forest.

II. Purposes

To prepare land for establishing a stand of trees through natural regeneration or planting.

III. Conditions Where Practice Applies

In under-stocked and un-stocked areas or in areas of undesired vegetation where the soils are suited to growing trees for wood crops.

IV. Federal, State, and Local Laws

Users of this standard shall comply with applicable federal, state and local laws, rules, regulations or permit requirements governing forest site preparation. This standard does not contain the text of federal, state, or local laws.

V. Criteria

A. General Preparation Criteria

The method, intensity, and timing of site preparation will match the limitations of the site, equipment, and the requirements of the desired woody species.

An appropriate site preparation method will be chosen to protect any existing desirable vegetation.

Remaining slash and debris shall not create a habitat for or harbor harmful levels of pests.

Remaining slash and debris shall not hinder the operation of equipment or create an undue fire hazard.

Site preparation activities shall not have a negative impact on threatened and endangered species or cultural resources.

B. Mechanical Site Preparation Criteria

Use this method where desired species require exposed mineral soil for establishment, where mechanical removal of competing vegetation is a necessity, or where a low ridge is desired to prevent loss of young trees on wet sites.

1. A heavy disc, bulldozer, K.G. blade, heavy plow, or other suitable implement may be used to prepare the site.

2. To minimize soil erosion and or runoff, the following criteria shall be implemented:

    a. Not more than 50 percent of the soil surface will be disturbed over the area treated.

    b. On sloping areas of 6 percent or more, all operations will be done on the contour as nearly as practicable.

    c. Additional erosion control practices will be installed as identified in an approved conservation plan.

3. Soil compaction and displacement will be minimized.

4. Ridges prepared for planting on wet sites will be no less than 36 inches wide and no more than 12 inches high.

5. This method is not suited to Woodland Suitability Group 4d2-3 (steep, stony soil).

C. Herbicide Site Preparation Criteria

When site preparation with herbicides is selected, the following criteria will be used:

1. Use only herbicides labeled for forestry applications.

2. Use in accordance with manufacturer's label recommendations as to amount, timing, and method of application.

3. Care will be exercised to prevent damage to wildlife and fish populations, agricultural crops, and desired vegetation in the vicinity due to herbicide drift, overspray, or runoff.

4. Herbicides will be applied under the direction of a qualified individual. Restricted-use herbicides must be applied by a licensed applicator.

D. Prescribed Burning Site Criteria

When burning is used to remove residue, expose mineral soil, and reduce brush and weed competition the following shall apply:

1. A burning permit will be obtained from the Wisconsin Department of Natural Resources, Sheriffs Department or township fire warden before burning is attempted.

2. Burning will not be done on organic soils.

3. All burning shall be conducted according to a burn plan developed to meet the criteria of NRCS, Field Office Technical Guide (FOTG) Section IV, Standard 338, Prescribed Burning.

VI. Considerations

When selecting the site preparation method, the planner should consider cost effectiveness and potential impact on wildlife habitat, water resources, and identified unique areas.

Visual quality objectives should be considered when selecting site preparation methods.

Anticipate possible off-site effects of site preparation and modify the site preparation design accordingly.

Consider personnel safety during site preparation activities.

Plans specifying use of herbicides should contain the following statement in the plan narrative:

> "If herbicides are handled or applied improperly or if unused portions are not disposed of safely, they may be injurious to humans, domestic animals, desirable plants, fish or other wildlife; and they may contaminate water supplies. Drift from aerial spraying can damage nearby crops and other vegetation. Follow the directions and heed all precautions on the container label."

VII. Plans and Specifications

Locate the practice site on the conservation plan map and document the practice extent and installation schedule in the conservation plan.

A. Document the method of treatment (mechanical, herbicide, or burning).

   1. If mechanical treatment is selected, identify blading, raking, plowing, ripping, mixing, chopping, scalping, mounding, dragging, trenching or rotovating as the method of site preparation.

   2. If herbicide treatment is selected, include statement that use is according to label and identify target species.

   3. If prescribed burn treatment is selected include a copy of the burning permit and burn plan.

B. If erosion control is needed, identify additional required practices such as strip treatment, FOTG Section IV, Standards 330, Contour Farming, and 340, Cover Crop.

In lieu of a conservation plan, provide a location map and the preceding documentation.

IX. Operation and Maintenance

Repair erosion control measures as necessary to ensure proper function. Access by vehicles during site preparation or after (i.e., before adequate tree and shrub establishment occurs) should be controlled to minimize erosion, compaction and other site impacts.

X. References

Smith, David Martin, 1962. The Practice of Silviculture, John Wiley & Sons, Inc., New York, NY.

State of Wisconsin Department of Natural Resources, 6-23-99. Silviculture and Forest Aesthetics Handbook.

Stoddard, Charles H., 1959. Essentials of Forestry Practice. The Roland Press Company, New York, NY.

USDA, NRCS Wisconsin Field Office Technical Guide (FOTG), Section IV, Practice Standards and Specifications.